

TABLE OF CONTENTS

VOLUME 1

S.0	Summary.....	S-1
S.1	Background	S-1
S.2	Project Objectives/Purpose and Need	S-3
S.3	Public Involvement Summary.....	S-4
S.3.1	Lake Davis Steering Committee	S-4
S.3.2	Public Scoping.....	S-5
S.3.3	Agency Consultation and Coordination	S-5
S.3.4	Public Review	S-6
S.4	Alternatives Considered and Proposed Project/Proposed Action.....	S-7
S.4.1	No Project/No Action.....	S-7
S.4.2	Proposed Project/Proposed Action – 15,000 Acre-Feet (Plus Treatment)	S-8
S.4.3	Alternative A – 15,000 Acre-Feet (Plus Treatment Including Powder)	S-8
S.4.4	Alternative B – 5,000 Acre-Feet (Plus Treatment)	S-9
S.4.5	Alternative C – 35,000 Acre-Feet (Plus Treatment)	S-9
S.4.6	Alternative D – 48,000 Acre-Feet (Plus Treatment)	S-9
S.4.7	Alternative E – Dewater Reservoir and Tributaries (No Chemical Treatment).....	S-10
S.5	Environmental Concerns.....	S-10
S.5.1	Physical Environment	S-10
S.5.2	Biological Environment	S-11
S.5.3	Human Environment	S-12
S.6	Summary of Environmental Impacts	S-14
S.7	Environmentally Superior Alternative.....	S-15
S.8	Issues to be Resolved.....	S-15

TABLE OF CONTENTS

1.0	Introduction	1-1
1.1	History and Background	1-1
1.1.1	Northern Pike Biology	1-2
1.1.2	Pike as an Invasive Species	1-3
1.1.3	Mechanisms of Escape and Spread from Lake Davis	1-6
1.1.4	Pike in California Ecosystems: the Potential for Damage	1-7
1.2	Project Objectives/Purpose and Need	1-9
1.3	Alternatives Considered in this EIR/EIS	1-10
1.3.1	No Project/No Action	1-13
1.3.2	Proposed Project/Proposed Action – 15,000 Acre-Feet (Plus Treatment)	1-14
1.3.3	Alternative A – 15,000 Acre-Feet (Plus Treatment Including Powder)	1-14
1.3.4	Alternative B – 5,000 Acre-Feet (Plus Treatment)	1-14
1.3.5	Alternative C – 35,000 Acre-Feet (Plus Treatment)	1-15
1.3.6	Alternative D – 48,000 Acre-Feet (Plus Treatment)	1-15
1.3.7	Alternative E – Dewater Reservoir and Tributaries (No Chemical Treatment)	1-15
1.3.8	Environmentally Superior Alternative	1-16
1.4	Decision Framework	1-16
1.5	Authority for the Project	1-17
1.6	Public and Agency Involvement	1-19
1.6.1	Lake Davis Steering Committee	1-19
1.6.2	Public Scoping	1-20
1.6.3	Agency Consultation and Coordination	1-22
1.6.4	Distribution of the EIR/EIS	1-23
1.6.5	Public Review of EIR/EIS	1-25
1.6.6	Intended Uses of the EIR/EIS	1-25
1.7	Environmental Concerns	1-27
1.7.1	Physical Environment	1-27
1.7.2	Biological Environment	1-28
1.7.3	Human Environment	1-29

TABLE OF CONTENTS

1.8	Related and Cumulative Analysis Programs and Projects.....	1-31
1.8.1	Relationship to CALFED Bay-Delta Program.....	1-31
1.8.2	Relationship to the Plumas National Forest (PNF) Land and Resource Management Plan	1-31
1.8.3	Relationship to the Sierra Nevada Framework Plan Amendment (SNFPA)	1-32
1.8.4	Relationship to National Invasive Species Strategy.....	1-32
1.8.5	DWR Pike Containment Structure at Lake Davis.....	1-32
1.8.6	Beckwourth Ranger District Tall Whitetop Project	1-33
1.8.7	Other Projects for Cumulative Analysis.....	1-33
1.9	Document Structure/Scope of Analysis	1-36
1.9.1	Document Structure.....	1-36
1.9.2	Scope of Analysis.....	1-36
1.9.3	Impact Significance Terminology	1-37
2.0	Project Alternatives	2-1
2.1	Project Area and Vicinity.....	2-1
2.2	No Project/No Action	2-1
2.2.1	Reservoir Operations.....	2-2
2.2.2	DWR Pike Containment System	2-9
2.2.3	Other Pike Control Measures	2-9
2.3	Proposed Project/Proposed Action – 15,000 Acre-Feet (Plus Treatment).....	2-10
2.3.1	Reservoir Drawdown and Refill.....	2-11
2.3.2	Rotenone Formulations, Concentrations, and Quantity	2-14
2.3.3	Treatment	2-15
2.3.4	Rotenone Neutralization.....	2-18
2.3.5	Spill Contingency Planning.....	2-21
2.3.6	Fish Removal and Disposal.....	2-22
2.3.7	Fish Restocking	2-23
2.3.8	Plumas National Forest Closures	2-23
2.4	Alternative A – 15,000 Acre-Feet (Plus Treatment Including Powder)	2-29
2.4.1	Reservoir Drawdown and Refill.....	2-29

TABLE OF CONTENTS

2.4.2	Rotenone Formulations, Concentrations, and Quantity	2-29
2.4.3	Treatment	2-30
2.4.4	Rotenone Neutralization.....	2-33
2.4.5	Plumas National Forest Closures	2-33
2.5	Alternative B – 5,000 Acre-Feet (Plus Treatment).....	2-33
2.5.1	Reservoir Drawdown and Refill.....	2-33
2.5.2	Rotenone Formulations, Concentrations, and Quantity	2-35
2.5.3	Treatment	2-35
2.5.4	Rotenone Neutralization.....	2-36
2.5.5	Plumas National Forest Closures	2-36
2.6	Alternative C – 35,000 Acre-Feet (Plus Treatment).....	2-36
2.6.1	Reservoir Drawdown and Refill.....	2-36
2.6.2	Rotenone Formulations, Concentrations, and Quantity	2-38
2.6.3	Treatment	2-38
2.6.4	Rotenone Neutralization.....	2-39
2.6.5	Plumas National Forest Closures	2-39
2.7	Alternative D – 48,000 Acre-Feet (Plus Treatment).....	2-39
2.7.1	Reservoir Drawdown and Refill.....	2-39
2.7.2	Rotenone Formulations, Concentrations, and Quantity	2-39
2.7.3	Treatment	2-40
2.7.4	Rotenone Neutralization.....	2-41
2.7.5	Plumas National Forest Closures	2-41
2.8	Alternative E – Dewater Reservoir and Tributaries (No Chemical Treatment).....	2-41
2.8.1	Reservoir Drawdown and Refill.....	2-43
2.8.2	Dewatering	2-44
2.8.3	Plumas National Forest Closure	2-47
2.9	Alternatives Considered but Eliminated from Further Evaluation	2-47
2.10	Comparison of Alternatives	2-48
2.11	Preferred Alternative.....	2-48
2.12	Mitigation Measures and Monitoring	2-48

TABLE OF CONTENTS

3.0	Surface Water Resources.....	3-1
3.1	Hydrology and Geomorphology	3-1
3.1.1	Environmental Setting/Affected Environment.....	3-1
3.1.2	Environmental Impacts and Consequences.....	3-17
3.2	Surface Water Quality.....	3-44
3.2.1	Environmental Setting/Affected Environment.....	3-44
3.2.2	Environmental Impacts and Consequences.....	3-51
4.0	Groundwater Resources.....	4-1
4.1	Environmental Setting/Affected Environment	4-1
4.1.1	Geology and Hydrogeology	4-1
4.1.2	Regulatory Environment	4-15
4.2	Environmental Impacts and Consequences	4-22
4.2.1	Evaluation Criteria and Environmental Concerns.....	4-22
4.2.2	Evaluation Methods and Assumptions.....	4-26
4.2.3	No Project/No Action.....	4-27
4.2.4	Proposed Project/Proposed Action – 15,000 Acre-Feet (Plus Treatment)	4-27
4.2.5	Alternative A – 15,000 Acre-Feet (Plus Treatment Including Powder)	4-31
4.2.6	Alternative B – 5,000 Acre-Feet (Plus Treatment)	4-32
4.2.7	Alternative C – 35,000 Acre-Feet (Plus Treatment)	4-32
4.2.8	Alternative D – 48,000 Acre-Feet (Plus Treatment)	4-32
4.2.9	Alternative E – Dewater Reservoir and Tributaries (No Chemical Treatment).....	4-32
4.2.10	Cumulative Impacts.....	4-33
4.2.11	Environmental Impacts Summary.....	4-35
4.2.12	Monitoring.....	4-35
5.0	Air Quality	5-1
5.1	Environmental Setting/Affected Environment	5-1
5.1.1	Study Area.....	5-1
5.1.2	Climate and Weather.....	5-5
5.1.3	Existing Conditions	5-5

TABLE OF CONTENTS

5.1.4	Ambient Air Quality Standards and Attainment Status	5-5
5.1.5	Regulatory Environment	5-8
5.2	Environmental Impacts and Consequences	5-16
5.2.1	Evaluation Criteria and Environmental Concerns.....	5-17
5.2.2	Evaluation Methods and Assumptions.....	5-18
5.2.3	No Project/No Action.....	5-19
5.2.4	Proposed Project/Proposed Action–15,000 Acre-Feet (Plus Treatment)	5-19
5.2.5	Alternative A: 15,000 Acre-feet (Plus Treatment Including Powder)	5-29
5.2.6	Alternative B: 5,000 Acre-Feet (Plus Treatment)	5-35
5.2.7	Alternative C: 35,000 Acre-Feet (Plus Treatment)	5-42
5.2.8	Alternative D: 48,000 Acre-Feet (Plus Treatment)	5-49
5.2.9	Alternative E: Dewater Reservoir and Tributaries (No Chemical Treatment).....	5-55
5.2.10	Environmental Impacts Summary.....	5-63
5.3	Monitoring	5-63
6.0	Noise	6-1
6.1	Environmental Setting/Affected Environment	6-1
6.1.1	Overview of Sound Measurement.....	6-1
6.1.2	Critical and Sensitive Receptor Assessment	6-2
6.1.3	Existing Sources and Conditions.....	6-3
6.1.4	Regulatory Setting.....	6-6
6.2	Environmental Impacts and Consequences	6-12
6.2.1	Evaluation Criteria and Environmental Concerns.....	6-12
6.2.2	Evaluation Methods and Assumptions	6-13
6.2.3	No Project/No Action	6-14
6.2.4	Proposed Project/Proposed Action – 15,000 Acre-Feet (Plus Treatment)	6-14
6.2.5	Alternative A – 15,000 Acre-Feet (Plus Treatment Including Powder)	6-16
6.2.6	Alternative B – 5,000 Acre-Feet (Plus Treatment)	6-16
6.2.7	Alternative C – 35,000 Acre-Feet (Plus Treatment)	6-16

TABLE OF CONTENTS

6.2.8	Alternative D – 48,000 Acre-Feet (Plus Treatment)	6-16
6.2.9	Alternative E – Dewater Reservoir and Tributaries (No Chemical Treatment).....	6-16
6.2.10	Cumulative Impacts.....	6-19
6.2.11	Environmental Impacts Summary	6-22
6.2.12	Monitoring.....	6-22
7.0	Biological Resources.....	7-1
7.1	Aquatic Resources	7-1
7.1.1	Environmental Setting/Affected Environment.....	7-1
7.1.1.1	Physical Setting	7-1
7.1.1.2	Species/Communities Present.....	7-4
7.1.1.3	Life History Descriptions of Fish Species	7-11
7.1.1.4	Aquatic Invertebrate Communities	7-20
7.1.1.5	Special Status Aquatic Invertebrates: Life Histories	7-22
7.1.1.6	Aquatic Communities by Waterbody	7-24
7.1.1.7	Regulatory Environment.....	7-30
7.1.2	Environmental Impacts and Consequences.....	7-31
7.1.2.1	Evaluation Criteria and Environmental Concerns	7-31
7.1.2.2	Evaluation Methods and Assumptions	7-36
7.1.2.3	No Project/No Action	7-36
7.1.2.4	Proposed Project/Proposed Action: 15,000 Acre-Feet (Plus Treatment)	7-37
7.1.2.5	Alternative A – 15,000 Acre-Feet (Plus Treatment Including Powder)	7-60
7.1.2.6	Alternative B – 5,000 Acre-Feet (Plus Treatment).....	7-60
7.1.2.7	Alternative C – 35,000 Acre-Feet (Plus Treatment)....	7-61
7.1.2.8	Alternative D – 48,000 Acre-Feet (Plus Treatment)	7-62
7.1.2.9	Alternative E – Dewater Reservoir and Tributaries (No Chemical Treatment).....	7-62
7.1.2.10	Cumulative Impacts	7-69
7.1.2.11	Environmental Impacts Summary	7-72
7.1.2.12	Monitoring	7-80

TABLE OF CONTENTS

7.2	Wildlife Resources.....	7-80
	7.2.1 Environmental Setting/Affected Environment.....	7-80
	7.2.1.1 Terrestrial Wildlife Resources.....	7-80
	7.2.1.2 Terrestrial Wildlife Habitat.....	7-80
	7.2.1.3 Wildlife.....	7-81
	7.2.1.4 Special Status Species of Terrestrial Wildlife	7-82
	7.2.1.5 Migratory Birds	7-141
	7.2.1.6 Regulatory Environment.....	7-142
	7.2.2 Environmental Impacts and Consequences.....	7-144
	7.2.2.1 Evaluation Criteria and Environmental Concerns	7-144
	7.2.2.2 Evaluation Methods and Assumptions	7-146
	7.2.2.3 No Project/No Action	7-146
	7.2.2.4 Proposed Project/Proposed Action – 15,000 Acre-Feet (Plus Treatment)	7-147
	7.2.2.5 Alternative A – 15,000 Acre-Feet (Plus Treatment Including Powder)	7-164
	7.2.2.6 Alternative B – 5,000 Acre-Feet (Plus Treatment)....	7-164
	7.2.2.7 Alternative C – 35,000 Acre-Feet (Plus Treatment)...	7-166
	7.2.2.8 Alternative D – 48,000 Acre-Feet (Plus Treatment) ..	7-166
	7.2.2.9 Alternative E – Dewater Reservoir and Tributaries (No Chemical Treatment)	7-167
	7.2.2.10 Cumulative Impacts	7-170
	7.2.2.11 Environmental Impacts Summary	7-174
	7.2.2.12 Monitoring	7-184
7.3	Botanical Resources.....	7-184
	7.3.1 Environmental Setting/Affected Environment.....	7-184
	7.3.1.1 Vegetation Communities	7-184
	7.3.1.2 Special Status Plant Species	7-187
	7.3.1.3 Noxious Weeds.....	7-194
	7.3.1.4 Regulatory Environment.....	7-195
	7.3.2 Environment Impacts and Consequences.....	7-196
	7.3.2.1 Environmental Concerns and Evaluation Criteria	7-196
	7.3.2.2 Evaluation Methods and Assumptions	7-198

TABLE OF CONTENTS

7.3.2.3	No Project/No Action	7-199
7.3.2.4	Proposed Project/Proposed Action – 15,000 Acre-Feet (Plus Treatment)	7-199
7.3.2.5	Alternative A – 15,000 Acre-Feet (Plus Treatment Including Powder)	7-202
7.3.2.6	Alternative B – 5,000 Acre-Feet (Plus Treatment)....	7-202
7.3.2.7	Alternative C – 35,000 Acre-Feet (Plus Treatment)...	7-202
7.3.2.8	Alternative D – 48,000 Acre-Feet (Plus Treatment) ..	7-203
7.3.2.9	Alternative E – Dewater Reservoir and Tributaries (No Chemical Treatment).....	7-203
7.3.2.10	Cumulative Impacts	7-205
7.3.2.11	Environmental Impacts Summary	7-209
7.3.2.12	Monitoring	7-211
8.0	Land Use and Management.....	8-1
8.1	Environmental Setting/Affected Environment	8-1
8.1.1	Existing Land Uses.....	8-1
8.1.2	Regulatory Environment	8-2
8.2	Environmental Impacts and Consequences	8-9
8.2.1	Evaluation Criteria and Environmental Concerns.....	8-9
8.2.2	Evaluation Methods and Assumptions	8-10
8.2.3	No Project/No Action	8-10
8.2.4	Proposed Project/Proposed Action – 15,000 Acre-Feet (Plus Treatment)	8-10
8.2.5	Alternative A – 15,000 Acre-Feet Plus Treatment (Including Powder)	8-13
8.2.6	Alternative B – 5,000 Acre-Feet (Plus Treatment)	8-13
8.2.7	Alternative C – 35,000 Acre-Feet (Plus Treatment)	8-13
8.2.8	Alternative D – 48,000 Acre-Feet (Plus Treatment)	8-13
8.2.9	Alternative E – Dewater Reservoir and Tributaries (No Chemical Treatment).....	8-14
8.2.10	Cumulative Impacts.....	8-14
8.2.11	Monitoring.....	8-16

TABLE OF CONTENTS

9.0 Aesthetic Resources.....	9-1
9.1 Environmental Setting/Affected Environment	9-1
9.1.1 Aesthetics of Project Area and Vicinity	9-1
9.1.2 Regulatory Environment	9-2
9.2 Environmental Impacts and Consequences	9-5
9.2.1 Evaluation Criteria and Environmental Concerns.....	9-5
9.2.2 Evaluation Methods and Assumptions	9-16
9.2.3 No Project/No Action.....	9-17
9.2.4 Proposed Project/Proposed Action –15,000 Acre-Feet (Plus Treatment)	9-17
9.2.5 Alternative A – 15,000 Acre-Feet (Plus Treatment Including Powder)	9-20
9.2.6 Alternative B – 5,000 Acre-Feet (Plus Treatment)	9-20
9.2.7 Alternative C – 35,000 Acre-Feet (Plus Treatment)	9-21
9.2.8 Alternative D – 48,000 Acre-Feet (Plus Treatment)	9-21
9.2.9 Alternative E – Dewater Reservoir and Tributaries (No Chemical Treatment).....	9-22
9.2.10 Cumulative Impacts.....	9-22
9.2.11 Environmental Impacts Summary.....	9-24
9.2.12 Monitoring.....	9-26
10.0 Cultural Resources	10-1
10.1 Environmental Setting/Affected Environment	10-1
10.1.1 Prehistory	10-1
10.1.2 Ethnography	10-2
10.1.3 History	10-2
10.1.4 Regulatory Environment	10-4
10.2 Environmental Impacts and Consequences	10-6
10.2.1 Evaluation Criteria and Environmental Concerns.....	10-6
10.2.2 Evaluation Methods and Assumptions	10-6
10.2.3 No Project/No Action.....	10-8
10.2.4 Proposed Project/Proposed Action – 15,000 Acre-Feet (Plus Treatment)	10-8

TABLE OF CONTENTS

10.2.5	Alternative A – 15,000 Acre-Feet (Plus Treatment Including Powder)	10-10
10.2.6	Alternative B – 5,000 Acre-Feet (Plus Treatment)	10-10
10.2.7	Alternative C – 35,000 Acre-Feet (Plus Treatment)	10-10
10.2.8	Alternative D – 48,000 Acre-Feet (Plus Treatment)	10-10
10.2.9	Alternative E – Dewater Reservoir and Tributaries (No Chemical Treatment).....	10-10
10.2.10	Cumulative Impacts.....	10-11
10.2.11	Environmental Impacts Summary.....	10-12
10.2.12	Monitoring.....	10-14
11.0	Recreation Resources	11-1
11.1	Environmental Setting/Affected Environment	11-1
11.1.1	Project Area and Vicinity	11-1
11.1.2	Alternative Recreation Substitute Sites near Lake Davis.....	11-8
11.1.3	Regulatory Environment	11-11
11.2	Environmental Impacts and Consequences	11-11
11.2.1	Evaluation Criteria and Environmental Concerns.....	11-11
11.2.2	Evaluation Methods and Assumptions.....	11-12
11.2.3	No Project/No Action	11-14
11.2.4	Proposed Project/Proposed Action–15,000 Acre-Feet (Plus Treatment)	11-15
11.2.5	Alternative A – 15,000 Acre-Feet (Plus Treatment Including Powder)	11-18
11.2.6	Alternative B – 5,000 Acre-Feet (Plus Treatment)	11-18
11.2.7	Alternative C – 35,000 Acre-Feet (Plus Treatment)	11-19
11.2.8	Alternative D – 48,000 Acre-Feet (Plus Treatment)	11-20
11.2.9	Alternative E – Dewater Reservoir and Tributaries (No Chemical Treatment).....	11-21
11.2.10	Cumulative Impacts to Recreation Resources.....	11-22
11.2.11	Environmental Impacts Summary	11-24
11.2.12	Monitoring.....	11-26

TABLE OF CONTENTS

12.0 Economic Resources.....	12-1
12.1 Environmental Setting/Affected Environment	12-2
12.1.1 Economic Overview of the Project Area.....	12-2
12.1.2 Economic Base	12-3
12.1.3 Housing and Property Values.....	12-7
12.1.4 Fiscal Resources.....	12-8
12.1.5 Baseline Economic Conditions Attributed to Lake Davis-Related Activities	12-9
12.1.6 Regulatory Environment	12-13
12.2 Environmental Impacts and Consequences	12-13
12.2.1 Evaluation Criteria and Environmental Issues	12-13
12.2.2 Evaluation Methods and Assumptions	12-14
12.2.3 No Project/No Action	12-16
12.2.4 Proposed Project/Proposed Action – 15,000 Acre-Feet (Plus Treatment)	12-20
12.2.5 Alternative A – 15,000 Acre-Feet (Plus Treatment Including Powder)	12-25
12.2.6 Alternative B – 5,000 Acre-Feet (Plus Treatment)	12-26
12.2.7 Alternative C – 35,000 Acre-Feet (Plus Treatment)	12-28
12.2.8 Alternative D – 48,000 Acre-Feet (Plus Treatment)	12-31
12.2.9 Alternative E – Dewater Reservoir and Tributaries (No Chemical Treatment).....	12-34
12.2.10 Cumulative Impacts.....	12-36
12.2.11 Environmental Impacts Summary	12-41
13.0 Public Services.....	13-1
13.1 Environmental Setting/Affected Environment	13-1
13.1.1 Law Enforcement	13-1
13.1.2 Fire Protection and Emergency Services	13-2
13.1.3 Domestic Water Supplies	13-2
13.1.4 Downstream Water Supplies	13-5
13.1.5 Other Public Services and Community Infrastructure	13-7
13.1.6 Regulatory Environment	13-7

TABLE OF CONTENTS

13.2	Environmental Impacts and Consequences	13-8
13.2.1	Evaluation Criteria and Environmental Concerns.....	13-8
13.2.2	Evaluation Methods and Assumptions	13-9
13.2.3	No Project/No Action.....	13-9
13.2.4	Proposed Project/Proposed Action – 15,000 Acre-Feet Plus Treatment	13-12
13.2.5	Alternative A – 15,000 Acre-Feet (Including Powder).....	13-19
13.2.6	Alternative B – 5,000 Acre-Feet Plus Treatment.....	13-20
13.2.7	Alternative C – 35,000 Acre-Feet Plus Treatment.....	13-22
13.2.8	Alternative D – 48,000 Acre-Feet Plus Treatment.....	13-25
13.2.9	Alternative E – Dewater Reservoir and Tributaries (No Chemical Treatment).....	13-27
13.2.10	Cumulative Impacts.....	13-30
13.2.11	Environmental Impacts Summary.....	13-33
13.2.12	Monitoring.....	13-35
14.0	Human & Ecological Health Concerns	14-1
14.1	Environmental Setting/Affected Environment	14-1
14.1.1	Toxicology and the Use of Pesticides	14-1
14.1.2	Regulatory Setting.....	14-19
14.2	Environmental Impacts and Consequences	14-21
14.2.1	Evaluation Criteria and Environmental Concerns.....	14-22
14.2.2	Evaluation Methods and Assumptions	14-24
14.2.3	No Project/No Action.....	14-36
14.2.4	Proposed Project/Proposed Action – 15,000 Acre-Feet (Plus Treatment)	14-36
14.2.5	Alternative A – 15,000 Acre-feet (Plus Treatment Including Powder)	14-51
14.2.6	Ecological Health	14-52
14.2.7	Human Health	14-53
14.2.8	Alternative B — 5,000 Acre-Feet (Plus Treatment)	14-53
14.2.9	Alternative C – 35,000 Acre-Feet (Plus Treatment)	14-54
14.2.10	Alternative D – 48,000 Acre-Feet (Plus Treatment)	14-55

TABLE OF CONTENTS

14.2.11	Alternative E –Dewater Reservoir and Tributaries (No Chemical Treatment).....	14-56
14.2.12	Cumulative Impacts.....	14-56
14.2.13	Environmental Impacts Summary	14-59
14.2.14	Monitoring.....	14-65
15.0	Social Issues and Environmental Justice	15-1
15.1	Environmental Setting/Affected Environment	15-1
15.1.1	Population Trends and Projections.....	15-1
15.1.2	Race/Ethnicity	15-2
15.1.3	Income-Related Measures of Social Well-Being	15-3
15.1.4	Regulatory Environment	15-3
15.2	Environmental Impacts and Consequences	15-5
15.2.1	Evaluation Criteria and Environmental Concerns.....	15-5
15.2.2	Evaluation Methods and Assumptions	15-6
15.2.3	No Project/No Action.....	15-9
15.2.4	Proposed Project/Proposed Action – 15,000 Acre-Feet (Plus Treatment)	15-11
15.2.5	Alternative A – 15,000 Acre-Feet (Plus Treatment Including Powder)	15-13
15.2.6	Alternative B – 5,000 Acre-Feet (Plus Treatment)	15-14
15.2.7	Alternative C – 35,000 Acre-Feet (Plus Treatment)	15-15
15.2.8	Alternative D – 48,000 Acre-Feet (Plus Treatment)	15-16
15.2.9	Alternative E – Dewater Reservoir and Tributaries (No Chemical Treatment).....	15-17
15.2.10	Cumulative Impacts.....	15-19
15.2.11	Environmental Impacts Summary	15-23
16.0	Other Required Disclosures	16-1
16.1	Short-Term Uses and Long-Term Productivity	16-1
16.1.1	Surface Water Resources	16-1
16.1.2	Groundwater Resources	16-1
16.1.3	Air Quality.....	16-2
16.1.4	Noise.....	16-2

TABLE OF CONTENTS

16.1.5	Biological Resources.....	16-2
16.1.6	Land Use and Management.....	16-3
16.1.7	Aesthetic Resources	16-4
16.1.8	Cultural Resources	16-4
16.1.9	Recreation Resources	16-4
16.1.10	Economic Resources	16-4
16.1.11	Public Services	16-4
16.1.12	Human and Ecological Health Concerns	16-4
16.1.13	Social Issues and Environmental Justice.....	16-5
16.2	Irreversible and Irretrievable Commitments of Resources	16-5
16.2.1	Energy Resources.....	16-5
16.2.2	Land Resources	16-6
16.3	Growth-Inducing Impacts	16-6
16.4	Unavoidable Adverse Impacts	16-6
16.4.1	No Project/No Action.....	16-6
16.4.2	Proposed Project/Proposed Action – 15,000 Acre-Feet (Plus Treatment)	16-7
16.4.3	Alternative A – 15,000 Acre-Feet (Plus Treatment Including Powder)	16-7
16.4.4	Alternative B – 5,000 Acre-Feet (Plus Treatment)	16-7
16.4.5	Alternative C – 35,000 Acre-Feet (Plus Treatment)	16-8
16.4.6	Alternative D – 48,000 Acre-Feet (Plus Treatment)	16-8
16.4.7	Alternative E – Dewater Reservoir and Tributaries (No Chemical Treatment).....	16-8
16.5	Energy Requirements and Conservation Measures	16-8
17.0	List of Preparers.....	17-1
17.1	California Department of Fish and Game (DFG)	17-1
17.2	US Forest Service (USFS)	17-1
17.3	US Department of Agriculture (USDA)	17-2
17.4	Consultant Team	17-2

TABLE OF CONTENTS

18.0 References.....	18-1
19.0 Index.....	19-1

- Appendix A Assessment of Northern Pike Habitat in California's Central Valley and Potential Impact of Introduction
Appendix B NOP/NOI and CEQA Initial Study
Appendix C Alternatives Formulation Report (AFR)
Appendix D Project Information/Drawdown and Refill Model
Appendix E Draft Neutralization Options
Appendix F Surface Water Quality Information
Appendix G Fisheries Management Plan
Appendix H Other Biological Resources Information

VOLUME 2

- Appendix I Local & Statewide Economic Impact Analyses
Attachment 1: Analysis of Local Economic Impacts
Attachment 2: Analysis of Statewide Economic Impacts
Appendix J Human Health and Ecological Risk Assessment
Appendix K Public Comments and Responses

List of Tables

- Table S-1 Summary Comparison of Impacts of Alternatives
- Table S-2 Significant Impacts and Mitigation for Proposed Project
- Table S-3 Significant Impacts and Mitigation for Alternative A
- Table S-4 Significant Impacts and Mitigation for Alternative B
- Table S-5 Significant Impacts and Mitigation for Alternative C
- Table S-6 Significant Impacts and Mitigation for Alternative D
- Table S-7 Significant Impacts and Mitigation for Alternative E
- Table 1.1-1 Summary of Pike Habitat in Waterways of the Central Valley
- Table 1.1-2 Ranked Listing of Vulnerability of Central Valley Native Species to Pike Predation
- Table 1.6-1 Potential Permits, Approvals, and Consultations
- Table 1.8-1 Other Projects for Cumulative Analysis
- Table 2.3-1 Features of the Proposed Project
- Table 2.4-1 Features for Alternative A
- Table 2.5-1 Features for Alternative B
- Table 2.6-1 Features for Alternative C
- Table 2.7-1 Features for Alternative D
- Table 2.8-1 Features for Alternative E
- Table 2.10-1 Comparison of Project Features for Lake Davis Northern Pike Eradication Alternatives
- Table 2.10-2 Summary of Environmental Impacts for Project Alternatives
- Table 3.1-1 Period of Flow Records for Big Grizzly Creek
- Table 3.1-2 Big Grizzly Creek Average Annual Flows for Nonregulated and Regulated Periods
- Table 3.1-3 Average Monthly Flows for Big Grizzly Creek
- Table 3.1-4 Recurrence Intervals for Nonregulated and Regulated Flows
- Table 3.1-5 Average Daily Flow Exceedance for Nonregulated and Regulated Flows
- Table 3.1-6 Average Daily Flow Exceedance for Middle Fork Feather River
- Table 3.1-7 Annual Peak Flows Middle Fork Feather River
- Table 3.1-8 Number of Events in which 200 cfs or Larger was Recorded for the Given Length of Time
- Table 3.1-9 Average Flows in Big Grizzly Creek during Drawdown to 15,000 Acre-Feet

TABLE OF CONTENTS

- Table 3.1-10 Duration of Average Flows for Drawdown to 15,000 Acre-Feet
- Table 3.1-11 Likelihood of Target Elevation Being Met Starting from 15,000 Acre-Feet
- Table 3.1-12 Average Flows in Big Grizzly Creek During Drawdown to 5,000 Acre-Feet
- Table 3.1-13 Duration of Average Flows for Drawdown to 5,000 Acre-Feet
- Table 3.1-14 Likelihood of Target Elevation Being Met Starting from 5,000 Acre-Feet
- Table 3.1-15 Average Flows in Big Grizzly Creek During Drawdown to 35,000 Acre-Feet
- Table 3.1-16 Duration of Average Flows for Drawdown to 35,000 Acre-Feet
- Table 3.1-17 Likelihood of Target Elevation Being Met Starting from 35,000 Acre-Feet
- Table 3.1-18 Average Flows in Big Grizzly Creek for Drawdown to 48,000 Acre-Feet
- Table 3.1-19 Duration of Average Flows for Drawdown to 48,000 Acre-Feet
- Table 3.1-20 Average Flows in Big Grizzly Creek to Completely Dewater Lake Davis
- Table 3.1-21 Duration of Average Flows for Drawdown to Completely Dewater Lake Davis
- Table 3.1-22 Likelihood of Target Elevation Being Met Starting from Complete Dewatering
- Table 3.1-23 Summary Comparison of Impacts of Alternatives
- Table 3.2-1 Summary Comparison of Impacts of Alternatives
- Table 4.1-1 Groundwater Level Monitoring, June 2006
- Table 4.1-2 PCEH Water Quality Test Summary
- Table 4.1-3 PCEH Water Quality Test Results; Summary of Wells with Positive Results
- Table 4.2-1 Summary of Treatment Chemicals and MCLs
- Table 4.5-1 Summary Comparison of Impacts of Alternatives and Non-degradation
- Table 5.1-1 California and Federal Ambient Air Quality Standards and Plumas County Attainment Status
- Table 5.1-2 Recommended and Permissible Exposure Limits for Rotenone Formulation Constituents
- Table 5.2-1 Air Quality Estimation Summary
- Table 5.2-2 Reservoir Parameters – Proposed Project
- Table 5.2-3 Chemical Application Parameters – Proposed Project
- Table 5.2-4 Maximum Day (Acute) and Total Project Chemical Emissions – Proposed Project
- Table 5.2-5 Summary of Priority Pollutants from Application and Equipment Operations – Proposed Project in Pounds per Day
- Table 5.2-6 Fugitive Dust Emissions, General Equipment Activity and Exposed Reservoir bed – Proposed Project

TABLE OF CONTENTS

- Table 5.2-7 Summary of Priority Pollutants from Removal and Transportation of Dead Fish – Proposed Project in Pounds per Day
- Table 5.2-8 Summary of Priority Pollutants for Proposed Project in Pounds per Day – populate following receipt of updated modeling results
- Table 5.2-9 Reservoir Parameters – Alternative A
- Table 5.2-10 Chemical Application Parameters – Alternative A (Powdered)
- Table 5.2-11 Maximum Day (Acute) and Total Project Chemical Emissions – Alternative A
- Table 5.2-12 Summary of Priority Pollutants from Application and Equipment Operations – Alternative A in Pounds per Day
- Table 5.2-13 Fugitive Dust Emissions, General Equipment Activity and Exposed Reservoir Bed – Alternative A
- Table 5.2-14 Summary of Priority Pollutants from Removal and Transportation of Dead Fish – Alternative A in Pounds per Day
- Table 5.2-15 Summary of Priority Pollutants for Alternative A in Pounds per Day
- Table 5.2-16 Reservoir Parameters – Alternative B
- Table 5.2-17 Chemical Application Parameters – Alternative B
- Table 5.2-18 Maximum Day (Acute) and Total Project Chemical Emissions – Alternative B
- Table 5.2-19 Summary of Priority Pollutants from Application and Equipment Operations – Alternative B in Pounds per Day
- Table 5.2-20 Fugitive Dust Emissions – General Equipment Activity and Exposed Reservoir Bed – Alternative B
- Table 5.2-21 Summary of Priority Pollutants from Stationary Dewatering – Alternative B – in Pounds per Day
- Table 5.2-22 Summary of Priority Pollutants from Removal and Transportation of Dead Fish – Alternative B in Pounds per Day
- Table 5.2-23 Summary of Priority Pollutants for Alternative B in Pounds per Day
- Table 5.2-24 Reservoir Parameters – Alternative C
- Table 5.2-25 Chemical Application Parameters – Alternative C
- Table 5.2-26 Maximum Day (Acute) and Total Project Chemical Emissions – Alternative C
- Table 5.2-27 Summary of Priority Pollutants from Application and Equipment Operations – Alternative C in Pounds per Day
- Table 5.2-28 Fugitive Dust Emissions, General Equipment Activity and Exposed Reservoir bed – Alternative C
- Table 5.2-29 Summary of Priority Pollutants from Removal and Transportation of Dead Fish – Alternative C in Pounds per Day
- Table 5.2-30 Summary of Priority Pollutants for Alternative C in Pounds per Day

- Table 5.2-31 Reservoir Parameters – Alternative D
- Table 5.2-32 Chemical Application Parameters – Alternative D
- Table 5.2-33 Maximum Day (Acute) and Total Project Chemical Emissions – Alternative D
- Table 5.2-34 Summary of Priority Pollutants from Application and Equipment Operations – Alternative D in Pounds per Day
- Table 5.2-35 Fugitive Dust Emissions, General Equipment Activity and Exposed Reservoir bed – Alternative D
- Table 5.2-36 Summary of Priority Pollutants from Removal and Transportation of Dead Fish – Alternative D in Pounds per Day
- Table 5.2-37 Summary of Priority Pollutants for Alternative D in Pounds per Day
- Table 5.2-38 Summary of Priority Pollutants from Application and Equipment Operations – Alternative E in Pounds per Day
- Table 5.2-39 Fugitive Dust Emissions, General Equipment Activity and Exposed Reservoir bed – Alternative E
- Table 5.2-40 Summary of Priority Pollutants from Stationary Dewatering – Alternative E – in Pounds per Day
- Table 5.2-41 Summary of Priority Pollutants from Removal and Transportation of Dead Fish – Alternative E in Pounds per Day
- Table 5.2-42 Summary of Priority Pollutants for Alternative E in Pounds per Day
- Table 5.2-43 Summary Comparison of Impacts of Alternatives
- Table 6.1-1 Critical and Sensitive Receptors
- Table 6.1-2 Ambient Noise Levels Representative of the Project Area
- Table 6.1-3 USEPA Designated Noise Safety Levels
- Table 6.1-4 Land Use Compatibility for Community Noise Environment
- Table 6.1-5 Ambient Outside Noise Levels
- Table 6.2-1 Summary Comparison of Impacts of Alternatives
- Table 7.1-1 Fish Species Present by Waterbody
- Table 7.1-2 Special Status Aquatic Species Potentially Occurring in the General Vicinity of Lake Davis
- Table 7.1-3 Lake Davis Fish Survey Abundance by Species and Year (DFG 2002, 2003, 2004)
- Table 7.1-4 Fish Composition and Abundance in Big Grizzly Creek below Lake Davis, 1997–2004
- Table 7.1-5 Time to Re-establishment from Rotenone Treatments

TABLE OF CONTENTS

- Table 7.1-6 Observed Coefficient of Variation (Expressed as Percent of Mean) for Selected Macroinvertebrate Indices in Five Lake Davis Watershed Streams
- Table 7.1-7 Summary Comparison of Impacts of Alternatives, Aquatic Resources
- Table 7.2-1 Special Status Wildlife Species Potentially Occurring in the General Vicinity of Lake Davis
- Table 7.2-2 Occupancy of breeding territories and productivity of bald eagles nesting at Lake Davis from 1978-2006.
- Table 7.2-3 Nesting success parameters for the Cow Creek and Mosquito Slough bald eagle nests at Lake Davis for the years 1982 through 2006.
- Table 7.2-4 Summary Comparison of Impacts of Alternatives, Terrestrial Wildlife Resources
- Table 7.2-5 Special Status Terrestrial Wildlife Species Effect Determinations
- Table 7.3-1 Special Status Plant Species Potentially Occurring in the Project Area
- Table 7.3-8 Summary Comparison of Impacts of Alternatives, Botanical Resources
- Table 8.1-1 Relevant LRMP Elements for the Recreation Area Prescription
- Table 8.2-1 Allocations and Acreage
- Table 8.3-1 Summary Comparison of Impacts of Alternatives
- Table 9.2-1 Lake Davis Refill Estimates for Most Rapid- and Slower- Scenarios
- Table 9.2-2 Summary Comparison of Aesthetics Impacts of Alternatives
- Table 10.2-1 Summary Comparison of Impacts of Alternatives
- Table 11.1-1 Estimated Annual Day Use Recreation Visits to Lake Davis Recreation Area
- Table 11.1-2 Campground use Data (Total Number of People) at Lake Davis Developed Campsites
- Table 11.1-3 Estimated Annual Recreation Hours by Activity, Big Grizzly Creek
- Table 11.1-4 Potential Substitute Locations for Lake Davis
- Table 11.1-5 Plumas National Forest LRMP Prescription for Recreation Resources
- Table 11.2-1 Estimated Visits to Lake Davis, 2007-2011
- Table 11.2-2 Estimated Total Visits to Lake Davis from 2007–2026
- Table 11.2-3 Estimated Lost Boater Visits at Lake Davis, 2007–2011
- Table 11.2-4 Predicted Drawdown Flows for Big Grizzly Creek
- Table 11.2-5 Estimated Number of Visitors Displaced to Frenchman Lake during Project Implementation
- Table 11.2-6 Summary Comparison of Impacts of Alternatives
- Table 12.1-1 Employment and Employment Growth (1990–2003)

- Table 12.1-2 Employment by Industry (2003)
- Table 12.1-3 Unemployment (1990-2004)
- Table 12.1-4 Total Personal Income and Income Growth (1990–2003)
- Table 12.1-5 Earnings by Industry (2003)
- Table 12.1-6 Housing Characteristics
- Table 12.1-7 Baseline Regional Economic Impacts from Lake Davis Recreation (Per 10,000 Non-Resident Visitor Days)
- Table 12.2-1 Summary of Short-Term Average Annual Economic and Fiscal Effects Across Project Alternatives (2007-2011)
- Table 12.2-2 Summary of Long-Term Average Annual Economic and Fiscal Effects Across Project Alternatives (2012-2026)
- Table 12.2-3 Overall Average Annual Economic and Fiscal Effects Across Project Alternatives (2007-2026)
- Table 12.2-4 Summary Comparison of Economic Impacts of Alternatives
- Table 13.2-1 Summary Comparison of Impacts of Alternatives
- Table 14.1-1 International (CAS), National (EPA-RC) and State (CDPR) Registration Codes for Chemicals Detected in Rotenone Formulations Proposed for Use in Lake Davis Project Area
- Table 14.2-1 Human Receptor Populations in Project Area with Complete Exposure Pathways
- Table 14.2-2 Hazard Quotient and Level of Concern Indices Estimated for Aquatic Receptor Organisms Inhabiting Lake Davis
- Table 14.2-3 Wildlife Hazard Quotients From Combined Ingestion Exposure Pathways
- Table 14.2-4 Comparison of Piscicide Component Concentrations in Ambient Air to Health-Based Screening Levels and Odor Threshold Concentrations Under Proposed Project
- Table 14.2-5 Modeled Air Concentrations for Noxfish® That Exceed Inhalation HBSLs and/or Odor Thresholds
- Table 14.2-6 Summary of Reasonably Foreseeable Herbicide Treatments in the Feather River Watershed
- Table 14.2-7 Proposed Treatment Details for Various Weed Species in the Preliminary Proposal for the Plumas NF Integrated Noxious Weed Control Program
- Table 14.2-8 Comparison of Impacts of Alternatives from Hazardous Materials Use on Human and Ecological Health
- Table 15.1-1 Population and Population Growth (1990–2005)
- Table 15.1-2 Population Projections (2000–2030)

TABLE OF CONTENTS

- Table 15.1-3. Race/Ethnicity (2003)
- Table 15.1-4. Income and Poverty Rates
- Table 15.2-1. Population by Ethnic and Racial Groups –.. California, Plumas County, Portola, and Selected Unincorporated Areas
- Table 15.2-2. Income and Poverty Rates
- Table 15.2-3. Summary Comparison of Impacts of Alternatives
- Table 17.4-1 Technical and Support Personnel

LIST OF FIGURES

- Figure 1-1 Alternative Reservoir Volumes
- Figure 2-1 Vicinity Map
- Figure 2-2 Delta Map
- Figure 2-4 Proposed Forest Closures
- Figure 2-3 Project Area
- Figure 3-1 Average Daily Flow for Big Grizzly Creek from WY 1925–2004 USGS Gage 11391500 and DWR Records
- Figure 3-2 Flow Duration Curves for Big Grizzly Creek
- Figure 3-3 Middle Fork Feather River near Portola, CA (USGS Gage 11392100 for WY 1968–1980)
- Figure 3-4 Daily Flow Duration for Middle Fork Feather River near Portola, CA (USGS Gage 11392100)
- Figure 3-5 Lake Davis Water Surface Elevation
- Figure 3-6 Minimum and Maximum Lake Davis Storage Volumes by Water Years 1970–2004
- Figure 4-1 Estimated Groundwater Elevation Contours in the Vicinity of Lake Davis
- Figure 4-2 Lake Level Compared to Groundwater Levels
- Figure 4-3 Groundwater Levels Compared to Precipitation
- Figure 4-4 Measured Groundwater Elevations, June 2006
- Figure 7-1 Catch per Unit Effort of Pike and Rainbow Trout in Lake Davis, 2000–2004
- Figure 7-2 Time to a 75 Percent Likelihood of Reservoir Refill to 27,000 Acre-Feet for Littoral Zone Recovery
- Figure 7-3 CNDB Records in the Project Vicinity
- Figure 9-1 Visual Quality Objectives in the Project Area
- Figure 9-2 Key Observation Points
- Figure 9-3 KOP 1, View of Lake Davis from Grizzly Valley Dam Looking Northwest
- Figure 9-4 KOP 2, View of Lake Davis from Honker Cove Looking West
- Figure 9-5 KOP 3, View of Lake Davis from Beckwourth Taylorsville Road (County Road 112) Looking Southwest
- Figure 9-6 KOP 4, View of Lake Davis from Fairview Point Looking Southwest
- Figure 9-7 KOP 4, View of Lake Davis from Fairview Point Looking Northwest
- Figure 9-8 KOP 5, View of Lake Davis from Old Camp 5 Looking Northwest
- Figure 9-9 KOP 5, View of Lake Davis from Old Camp 5 Looking Southeast

TABLE OF CONTENTS

- Figure 14-1 Conceptual Human Exposure Model for Rotenone and Rotenone Formulation Constituents
- Figure 14-2 Conceptual Ecological Exposure Model for Rotenone and Rotenone Formulation Constituents
- Figure 14-3 Sensitive Land Uses within 6 Miles of Grizzly Valley Dam
- Figure 14-4 Sensitive Populations

List of Acronyms, Abbreviations and Symbols

%	percent
°C	degree Celsius
°F	degree Fahrenheit
µg/L	micro-grams per liter
AFR	Alternatives Formulation Report
APDE	areas of potential direct effect
APE	area of potential effect
AQCR	Mountain Counties Intrastate Air Quality Control Region
ATCMs	Air Toxics Control Measures
ATSDR	Agency for Toxic Substances and Disease Registry
Basin Plan	Water Quality Control Plan for the Sacramento River Basin and the San Joaquin River Basin
BEHMA	Lake Davis Bald Eagle Habitat Management Area
BGEPA	Bald and Golden Eagle Protection Act
BLM	Bureau of Land Management
BOD	biochemical oxygen demand
CAA	Clean Air Act
CAAA	Clean Air Act Amendments
CAAQS	California Ambient Air Quality Standards
CalEPA	California Environmental Protection Agency
CAR	Critical Aquatic Refuge
CARB	California Air Resources Board
CCR	California Code of Regulations
CDEC	California Data Exchange Center
CDF	California Department of Forestry & Fire Protection
CDPR	California Department of Pesticide Regulation
CEQA	California Environmental Quality Act
cfs	cubic feet per second
CHHSLs	California Human Health Screening Levels
CHP	California Highway Patrol
CHRIS	California Historical Resources Information System

TABLE OF CONTENTS

CNEL	Community Noise Equivalent
CO	Carbon Monoxide
CRHR	California Register of Historical Resources
CSM	conceptual site model
CSUC	California State University, Chico
CSWRBCB	California State Water Resources Control Board
CVP	Central Valley Project
CWA	Clean Water Act
CWD	Coarse Woody Debris
dB	Decibels
DBDW	Department of Boating and Waterways
dbh	diameter of breast height
DDE	Dichlorodiphenyldichloroethylene
DFG	California Department of Fish and Game
DFPZ	Defensible Fuel Profile Zone
DHS	California Department of Health Services
DWR	California Department of Water Resources
EAC	Early Action Compact
EDUs	equivalent dwelling units
EHAP	Environmental Hazards Assessment Program
EIR	Environmental Impact Report
EIS	Environmental Impact Statement
EPC	exposure point concentration
ERP	Ecosystem Restoration Program
ESA	Federal Endangered Species Act
FAA	Federal Aviation Administration
FAR	Federal Aviation Regulation
FFDCA	Federal Food, Drug, and Cosmetic Act
FGC	California Fish and Game Code
FIFRA	Federal Insecticide, Fungicide and Rodenticide Act of 1972
FY	fiscal year
GIS	Geographic Information Systems

TABLE OF CONTENTS

GLRID	Grizzly Lake Resort Improvement District
gpm	gallons per minute
HAP	hazardous air pollutant
HBSL	Health Based Screening Level
ICS	Incident Command System
ISO	Insurance Services Office
KOP	Key Observation Point
LDSC	Lake Davis Steering Committee
L_{eq}	equivalent noise level
LLNL	Lawrence Livermore National Laboratory
Lmax	maximum sound level
Lmin	minimum sound level
LOAEL	Lowest Observable Adverse Effects Level
LOP	Limited Operating Period
LORs	local laws, ordinances, and regulations
LRMP	Land and Resource Management Plan
M&I	municipal and industrial
MACT	maximum achievable control technology
MBTA	Migratory Bird Treaty Act
MCAB	Mountain Counties Air Basin
MCLs	Maximum Contaminant Levels
mg	milligram
MIS	management indicator species
MOA	Memorandum of Agreement
MSDS	material safety data sheet
NAICS	North American Industry Classification System
NEIC	Northeast Information Center
NEPA	National Environmental Policy Act
NESHAPS	National Emission Standards for Hazardous Air Pollutants
NHPA	National Historic Preservation Act of 1966
NIOSH	National Institute for Occupational Safety and Health
NO	nitric oxide

TABLE OF CONTENTS

NO ₂	nitrogen dioxide
NOA	Notice of Availability
NOAEL	no-observed adverse effects level
NOC	Notice of Completion
NOEL	no observed effect level
NOI	Notice of Intent
NOP	Notice of Preparation
NPDES	National Pollutant Discharge Elimination System
NPV	net present value
NRHP	National Register of Historic Places
NSPS	New Source Performance Standards
NSR	New Source Review
NVUM	National Visitor Use Monitoring
O&M	operations and maintenance
OHV	Off-Highway Vehicle
OM	Operations Manual
OPR	California Office of Planning and Research
OSHA	Occupational Safety and Health Administration
PAC	Protected Activity Center
PAOT(s)	Person(s) At One Time
PBO	piperonyl butoxide
PCEH	Plumas County Environmental Health
PCFCD	Plumas County Flood Control and Water Conservation District
PELs	permissible exposure limits
pH	Phosphates
PM	Particulate Matter
PNF	Plumas National Forest
ppb	parts per billion
PPE	Personal Protective Equipment
PSD	Prevention of Significant Deterioration
PUC	Public Utilities Code
PWC	Personal Water Craft

TABLE OF CONTENTS

RCA	Riparian Conservation Area
RCO	Riparian Conservation Objective
RfD	reference dose
ROD	Record of Decision
RT	rainbow trout
RWQCB	Regional Water Quality Control Board
SCAQMD	South Coast Air Quality Management District
SEIS	Supplemental EIS
semi-VOCs	semi-volatile organic compounds
SF	slope factor
SHPO	State Historic Preservation Officer
SIC	Standard Industrial Classification System
SIP	State Implementation Plan
SMS	Scenic Management System
SNFPA	Sierra Nevada Forest Plan Amendment
SO2	Sulfur Dioxide
SPL	sound pressure levels
SPPPC	Sierra Pacific Power Company
SWP	State Water Project
TACs	toxic air contaminants
TMDL	Total Maximum Daily Load
TOC	total organic carbon
TRV	toxicity reference value
TSCA	Toxic Substances Control Act
TWA	Time-Weighted Average
UR	unit risk
USEPA	United States Environmental Protection Agency
USFS	United States Forest Service
USGS	U.S. Geological Survey
VOCs	volatile organic compounds
VOL	volatile organic liquid
VQO	Visual Quality Objective

TABLE OF CONTENTS

WoE	weight of evidence
WUI	Wildland Urban Intermix